EXHIBIT 'J'

A. They usually use some kind of a buffing wheel with a little bit of a polishing compound although I've not seen that specified here exactly what was, what they were using as their polishing compound.

Q. Do you believe that the polisher waste generated at the Handy Harman facility would have contained some sort of a polishing compound?

MS. FLAX: Objection to the form.

A. More likely than not.

Q. What's your basis for that statement?

A. That's the way things -- that's the way metal is polished with a polishing compound.

Q. What is the make up of a polishing compound?

A. As I said, I don't know what they would have been using for their polishing compound.

Q. Do you have any opinion at all as to what constituents may be in a polishing compound?

MS. FLAX: Objection to the form.

A. There are a whole variety of things that are used for different purposes and I would only be guessing what they're using in this case.

Q. In paragraph 31C you state that spent acids were generated at the Handy Harman facility, can

you tell me how those spent acids came to be?

A. As I said the tubes are washed in an acid bath and with time the reaction eats up the hydrogen ions and so then you don't have as low a pH as you want in your acid bath and also dirt accumulates in the acid bath. So what they do periodically, what they did here periodically is pump that spent acid into their spent acid holding tank or tanks which were downstairs below the acid bath.

Q. What kind of compounds did this spent acids contain?

A. It would have contained certainly iron, nickel and chromium.

Q. What is the basis for your statement that spent acids would contain iron, nickel and chromium?

A. The metal parts that were being put in the acid bath were made up of metals that had those elements in them and some of them would have eroded, corroded off during the acid bath and gone into solution and perhaps precipitated.

Q. Can you tell me how the bottom sludges that you reference in paragraph 31D came to be?

A. The bottom sludges resulted from the heavy contaminants, dirt essentially, if you will,

waste?

A. No.

Q. Other than oil, grease and metals, wash water and possibly some soap agent, were there any other compounds that you believe would be found in the industrial waste solution that you describe in paragraph 42 of your expert report?

A. It's possible that the other cleaning compounds that they, chemicals that they used acetone or methyl ethyl ketone could show up in low concentrations but they'd be very low.

Q. It's your testimony that there would be no TCE, I believe you testified earlier that TCE would not come in contact with any machines that the industrial waste solution would have cleaned?

MS. FLAX: Objection to the form.

Q. Is that correct?

A. I'm not aware of any mechanism by which TCE would have come in contact with them.

Q. How is it that the MEK and acetone would have come in -- could have been in the industrial waste solution but TCE couldn't have been?

A. They could have been used to wipe down the machinery whereas TCE was not used for that purpose.

Q. How do you know TCE was not used for that purpose?

A. There's no reference to it being used for that purpose.

Q. So is it your belief if you refer to Curran's deposition testimony page 54 line 19 when he speaks about industrial waste solution that it may have contained traces of some solvents, which solvents were they?

A. Well, he says -- what line are you on?

Q. 19 and 20.

A. The only thing he says there is something like acetone. And the other thing that's like acetone is methyl ethyl ketone which we already covered.

Q. Would the presence of acetone and possibly methyl ethyl ketone render the industrial waste solution hazardous?

MS. FLAX: Objection to the form.

A. Again, I don't believe they would have been in high enough concentrations, they evaporate quickly, partition into the air and would have been if present in very low concentrations.

Q. If present in the industrial waste solution?

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Techalloy, Carpenter, and also the information on the etchings that that were used by Flexible.
Q. Did you talk with Handy Harman or any representatives of Handy Harman to prepare for your deposition today?
A. No, I did not.
Q. Did you speak to Handy Harman's lawyers in preparation for your deposition today?
A. Yes.
Q. Who did you speak with?
A. Talked with Melissa Flax.
Q. Anyone else?
A. Briefly with John.
Q. Agnello?
A. Agnello, yes.
Q. When did you, did you speak with them?
A. Spoke with Melissa last evening and this morning, and spoke with John briefly this morning.
Q. Where did you speak to Melissa last night?
A. We had supper together last evening.
Q. What did you discuss?
MS. FLAX: Objection as to form.
You can answer only that which relates to your entree -- you can answer.

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A. We just discussed in general what depositions have been taken and she wanted to make sure that I had looked at those and that I had read my own deposition. And talked a little bit about the acids, particularly acid from Ashland, and the plating solutions, how low their pH's are, very acids, very low pH's. And also that those acids would be in themselves number one they're listed hazardous wastes and number two they would be classified as hazardous wastes because of their pH and likely their metal contents even though, even if they hadn't been listed.
Q. What was the -- because of the pH and their --
A. And their metal content, Ashland's metal content may not be high enough to be classified by metals alone but there would certainly be some trace metals in that.
Q. Did you discuss anything else about this case?
A. That pretty much summarizes it.
Q. What did you speak to Melissa and John about this morning?
MS. FLAX: Objection as to form.
A. We didn't speak very much about the case, it was more, the technical aspects of the case,

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it was more about who might be here representing whom and again a few of the things that I just said I repeated for John. One other thing that I did mention that now comes to mind is that and I said this last time but since we talked about it again, that is that the acids that were dumped there particularly the pickling solutions and the spent acid from the Ashland activity, in my view they certainly had an impact on the mediation, because they do a variety of things in the soil and the weathered bedrock the groundwater is on and essentially facilitate the movement of metals. And those things would be among other things the displaced metals that are present they load the system with hydrogen ions so that as any other solution groundwater carrying metals comes into that zone those metals remain soluble and mobile.
Those acids also destroy the organic components of the natural geological material that would have been receptors for metals. So they decrease the ability of soils to absorb metals that further facilitates the movement of metals. We also see that at these very low pH's, the microorganism population is greatly impacted detrimentally, which means that in fact as a result the normal biological attenuation for other contaminants, particularly the

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organic solvents, the trichlorethylenes, the benzenes and other things, is greatly diminished. So if you diminish the natural attenuation then that means that the remediation is going to be dealing with higher concentrations and be dealing with them for a longer time than it would have been had those acids not reached the groundwater.
Q. Okay. I'm going to hand you what we marked during the first day of your deposition as Brown-1, it's a copy of your expert report.
A. Yes.
Q. Can you turn to paragraph 39 of your report on page 13.
A. Yes.
Q. Given what you just told me about spent acids and how they would have -- and your opinion that they did have and impact on the site, can you explain to me what you mean by paragraph 39 where you say spent acids did not drive the remedy at the site?
A. I was quoting the EPA and they're saying that they -- what they're saying is that the remediation was not driven by the need to remove the spent acid. What I'm saying is now that the spent acids that were released into the system while it didn't drive the remedy those spent acids have

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facilitated the movement of metals and prevented the degradation of organics. So that in the end while they didn't drive the remedy they caused the remedy to be more expensive and take more time.

Q. So if the Ashland spent acid waste was the only contaminant that was disposed of at the site would there be a need for remediation?

MS. FLAX: Objection as to form.

A. If the Ashland acid had been the only one disposed of there since it had only low concentrations of metals what it would have done then is as it did do move the metals that were normally in the soil into the groundwater and put them in a free form. But we don't -- what I don't have is enough information to know whether that, those metals alone would have been high enough to call for remediation, that I don't know so I really can't answer one way or another.

Q. When you say you were quoting from the EPA what document were you quoting from?

A. It's the Superfund Record of Decision.

Q. If I were to show you the 1998 Record of Decision can you show me where that states that spent acids did not drive the remedy at the site?

A. It's kind of the inverse, and that is,

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it does not list spent acids as the driver for the remedy. So the absence of it is what I'm citing there.

Q. Okay. Going back to what you did to prepare for today's deposition, was your conversation with Melissa Flax last evening and your subsequent conversation with Melissa and John this morning the only conversations you've had with Handy & Harman lawyers from the first day of your deposition until now?

A. That's correct. I did not talk to either one of them in the interim.

Q. So did you take it upon yourself to review the expert reports of the other, or the deposition transcripts of the other experts?

A. They were conveyed to me by Melissa so I reviewed them, yes.

Q. Did she give you any instruction when you, to review the expert deposition?

A. No.

Q. They were conveyed to you by mail, by e-mail, how?

A. E-mail, actually and I should clarify that. They were conveyed to Mike Golladay who printed them off and gave them to me.

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Q. So the instruction was just to review them, review them for anything in particular?

MS. FLAX: Objection as to form.

A. It was just --

Q. Just to give them to you?

A. To review them.

Q. Can you turn to paragraph 23 of your report. We talked about your opinion in paragraph 23 in detail during the first day of your deposition?

A. Right.

Q. Can you tell me, is this an accurate characterization of that opinion, that you reviewed the Federal On-scene Coordinator's Report to determine the chemical make-up of drums and concluded that even though some contaminants in the drums may be associated with Handy & Harman waste the fact that they there are also contaminants in those drums that cannot be associated with Handy & Harman wastes supports that no contaminants in the drums came from Handy & Harman; is that correct?

MS. FLAX: Objection as to form.

A. Yes. What I'm saying is that there's no evidence on site as a result of that that you can actually fingerprint back to Handy & Harman.

Q. Okay. Quickly on page -- I also want to

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hand you the, your deposition transcript from the first day of your deposition. If you look on page 64 of that deposition lines 20 to 21.

A. Yes.

Q. You state that cadmium could not be associated with Handy & Harman because it is deliberately excluded from stainless steel; do you see that?

MS. FLAX: I think you have the wrong citation.

MS. TROJECKI: Off the record.

(A discussion was held off the record.)

Q. So I'm sorry that was page 63 lines 20 and 21. You state that cadmium could not be associated with Handy & Harman because it's deliberately excluded from stainless steel; do you see that?

A. Yes.

Q. Does this apply to all raw materials used at Handy & Harman?

A. Anything dealing with stainless steel it would apply to.

Q. So would that apply to the nickel based inconel steel?

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found of some of the solvents, can you explain or do you know how traces of solvents were found in the industrial waste solution -- I guess what I'm asking you is from reading that sentence does that imply that the industrial waste solution was tested at some time?

MS. FLAX: I'm going to ask Dr. Brown to read the questions and answers that precede it so he has some context as to what the witness is saying.

MS. TROJECKI: That's fine.

A. Yes.

Q. But you didn't review any test results for this solution that Curran is referring to; is that correct?

MS. FLAX: I think Dr. Brown was saying yes he read the pages, I don't know that he was responding to your question.

Can you read the question back.

(The requested portion was read back by the reporter.)

A. Well, it does imply that the industrial waste solution was tested. It appears it was tested for acetone and for some reason that I'm not quite clear on they adamantly didn't want acetone and likely then methyl ethyl ketone in contact with their

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machines. So when he says traces of solvents he's referring back to the acetone.

Q. How do you know that or where does it say that?

A. Line 18 through 20.

Q. Where he says would use something like acetone to clean up around the machines?

A. Right, and that would be the something would be acetone or methyl ethyl ketone. They're both keytones are in the same family of chemicals.

Q. Is TCE something like acetone?

A. No.

Q. Why not?

A. It's chemically completely different. It's not soluble. It's not miscible with water, acetone and methyl ethyl ketone are miscible with water.

Q. But TCE and acetone are both used as a degreaser; is that correct?

MS. FLAX: Objection.

A. The when you say degreaser, in this plant TCE was used as a degreaser for the tubes in the degreasing machine. It could be used as a degreaser. TCE has been used as I told you for degreasers for machinery and other applications, but in this

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application they were trying to certainly to keep acetone and by implication methyl ethyl ketone away and there's no implication they used TCE as a degreaser on their machines.

Q. What do you mean when you're saying they were trying to keep acetone and methyl ethyl ketone away?

A. He said they were afraid maybe somebody would use something like acetone to clean up around the machines.

MS. FLAX: Just so the record is clear, Dr. Brown is quoting from the Curran transcript.

A. And you know, acetone is a perfectly useful for that purpose. It implies to me that they were trying to keep this waste clear of solvents so they'd have a non-hazardous waste stream.

Q. Could it be also that they tested the material because they knew there would be some likelihood that there would be solvents in it?

MS. FLAX: Objection as to form.

A. That's what essentially it says, that it was possible that solvents would get in and they didn't want them in there.

Q. Where did the term industrial waste

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solution come from?

MS. FLAX: Objection to form.

Q. Do you know if that's a Handy & Harman term or a DeRewal chemical company term?

MS. FLAX: Objection to form. You just asked three questions.

(The requested portion was read back by the reporter.)

Q. Do you understand what I'm asking?

A. It appears on the Handy & Harman invoice from DeRewal, and then Curran accepts and utilizes that term, for describing the waste that we've just been talking about.

Q. It's your opinion that the solution that Curran is referring to in his deposition as industrial waste solution is non hazardous; is that correct?

A. Yes.

Q. Why do you think that?

MS. FLAX: Objection. Asked and answered.

You can answer it.

A. It's not a listed hazardous waste. It would not fail any of the four criteria for being a hazardous waste. It would not fail toxic concentration -- it's a test for soluble metals in

waste, if I have the acronym right, TCLP, I'll get you the right acronym, it wouldn't fail that test, it wouldn't have a pH outside the normal range. It wouldn't be flammable. It wouldn't be corrosive. So it wouldn't be reactive. So there's nothing there that would indicate that it was a hazardous waste.

Q. Going back for one minute, if the tubes were cleaned with TCE and taken to the drawing machines, is it possible that TCE could be a residual, TCE would be on the drawing machines or any of the machines that were cleaned during the annual shut down process?

MS. FLAX: Objection. Asked and answered.

A. Well, they were annealed between being cleaned and drawn again so the TCE would have been evaporated.

Q. How about if they weren't annealed?

A. Again, it evaporates very rapidly.

Q. When you say that the solution that Curran is referring to as industrial waste solution is not a listed hazardous waste, explain to me what you mean by that?

A. Well, there are certain waste streams from industries that are listed in RCRA, for instance

spent acid from farming nitrotoluene, pickling liquids are from steel processing and metal processing are listed hazardous wastes. So it doesn't make any difference what the concentration of anything is in there it's listed, it's a hazardous waste. And so that's one criteria for becoming a hazardous waste and cleaning solutions from machinery mechanical equipment is not listed.

Q. Now, if the cleaning solution was not listed as a hazardous waste but it did contain acetone and methyl ethyl ketone is there some concentration of those contaminants that would render it a hazardous waste?

A. Yes, it would have to have a high enough concentration.

Q. What is that concentration?

A. I'd have to look it up for those. It's rather high. Neither of those are very toxic.

Q. Is that concentration set out in regulations, is that what you're referring to?

A. Let me check, I'll look for you.

Q. Does EPA require that testing be done to determine whether a waste is hazardous or not?

A. It all depends on what waste, we're talking about an industrial waste, if there's nothing

in the process that would cause it to be hazardous then there's no need for testing.

Q. Who makes that determination?

A. Well, typically that's an honor system, the responsible people at a plant or an industry would make that determination, perhaps then in accordance with state guidelines and usually the determination is made for the purposes of disposal. So if they're going to ship it off for disposal states have programs that allow them to register their wastes so they can be disposed of at certain locations, almost all the states now have jurisdiction over these regulations.

Q. How is it that you know that the concentrations of whatever solvents were in the industrial waste solution were not high enough to render it hazardous?

A. Well, they're talking here about keeping those solvents out of the wastes and he said they found traces if anything, on occasion they found traces, well that means that they were very low concentrations.

Q. Any other reason?

MS. FLAX: Was that a yes or a no?

A. That was a no, no there are no other reasons.

MS. FLAX: Is now a good time for a break, Amy?

MS. TROJECKI: Let me make sure.

Q. I guess if today all you had was the information that was in Curran's deposition transcript regarding the description of this industrial waste solution, would you feel confident telling a company that you don't need to do any further tests to determine whether it's hazardous or not?

A. Yes.

MS. FLAX: Objection as to form.

A. If I might add it just occurred to me the concentrations of acetone and methyl ethyl ketone that are the cut off as to whether a waste is hazardous or not is one hundred times the drinking water standard for those two chemicals, so if we refer to the drinking water standards if it's one hundred times over that standard then the waste would be classified as hazardous, quite confident it would be well below that.

Q. And that's from your getting that information from regulations the one hundred percent times?

A. One hundred times is the way it's done. They never say that but if you look at the numbers